Attachment 1 – Letter to DTSC June 20, 2003 from Jim Cunningham et al

June 20, 2003

Mr. Mohinder Sandhu
Chief, Northern California Permitting Branch

Hazardous Waste Management Program
Department of Toxic Substances Control Region 2 (DTSC)
700 Heinz Avenue, Suite 200
Berkeley, CA., 94710-2737

RE: COMMUNITY INPUT for the Resource Conservation and Recovery Act (RCRA) Corrective Action process at the Lawrence Berkeley National Laboratory (LBNL)

Dear Mr. Sandhu:

The following comments and requests represent years of community effort, frustrations and disappointment with 'regulators' in our commitment to analyze, inform, and insist on seriously cleaning up LBNL radioactive and hazardous chemical waste from the air, soil, groundwater, creeks, trees, vegetation, and aquatic species from Lawrence Berkeley National Laboratory on University of California land in Berkeley and Oakland.

For the intent of the Resource Conservation and Recovery Act, we call for a Source Water Protection Plan to conserve and recover the Upper Strawberry Creek Watershed that is still impacted by spreading toxic plumes. In this regard, we request a comprehensive watershed analysis be conducted of the drinking "water bank" (Lennert Aquifer) and its groundwater movements feeding Strawberry Creek tributaries for a healthy environmental recovery.

We call for an Ecological Protection Zone in the Strawberry Creek Canyon and the Berkeley-Oakland Hills to conserve and protect human and ecological life from further harm in the 21st Century.

For the Corrective Action Process of the RCRA we call for a state-of-the-art assessment of the LBNL waste using GIS mapping data of the water sources, the 4 earthquake faults and the ground water plumes layered on the California Geological Survey Seismic Hazard Maps that indicates the LBNL site at very high risk of earthquake induced landslides. For the safety of LBNL workers, campus employees as well as neighbors, it would be prudent to take great care in studying the potential impacts from seismic movement breaking out the borders of the toxic groundwater plumes and pits.

We further request that the cumulative environmental impacts of the 174 radioactive and hazardous units be considered as well as the synergistic effects of radionuclides, chemicals and bio-agents (combined) on human and ecological receptors.

We expect the key elements of the Precautionary Principle be included into DTSC's decision making process.

Background of Community Imput

During the past ten years community input into the RCRA Corrective Action process at LBNL has been virtually non-existent. In spite of the formal request made by the Berkeley City Council to include members of the public, the Department of Toxic Substances Control, the Department of Energy (DOE), and LBNL refused to include community participation at the RCRA Quarterly Review meetings.

The Lab's response was to provide a pitiful one hour presentation by an LBNL representative at 6 PM before the official scheduled Community Environmental Advisory Commission (CEAC) meeting at 7 PM four times a year during the past few years. This untimely arrangement provided no chance for the public to gain a comprehensive understanding of the RCRA activities at LBNL nor the time for a meaningful discussion.

History of Contamination

The Lab originated on the UC Berkeley Campus in 1932 as the UC Radiation Laboratory (the Rad Lab). In 1940, it was relocated to its present site in the Strawberry Creek Watershed in the steep Berkeley Hills east of the central campus next to the Hayward Earthquake Fault. The first major facility, the 184-inch Synchrocyclotron was built with funds from both private and university sources. After 1948, the U.S. Atomic Energy Commission and its successor agencies funded the Lab. In 1972 the name was changed from the Lawrence Radiation Laboratory to Lawrence Berkeley Laboratory.

For the past sixty three years radioactive and chemical releases, and accidents have contaminated the once, beautiful pristine watershed of Strawberry Canyon and nearby wild lands, neighboring residents, and school children to the Lawrence Hall of Science as well as people recreating on the canyon trails, swimming, and attending football games.

Not until 1988 was the first Environment, Health and Safety related assessment of LBNL made by DOE. It was followed by the Tiger Team Assessment of 1991 which found 678 violations of DOE Regulations covering management practices at LBNL, finding Berkeley-Oakland air, soil and water contaminated with TRITIUM, other RADIOACTIVE substances and toxic chemicals; It is indisputable that the Lab was not in compliance with federal standards for radioactivity in air. Because of these findings, DOE funded the California Agreement in Principle (AIP) Program to be conducted by the California Department of Health Services (DHS) which has jurisdiction over radioactivity in California.

In September of 1995, the DHS Environmental Management Branch released the AIP Annual Report. As an example: the report scathingly criticizes the "efficiency and validity of the methods employed at LBNL to measure and monitor airborne Tritium". (Pg. 14) Within a few months DOE cuts the funding for the entire AIP Program and takes control over the handling of the 8 cited radioactively contaminated sites at LBNL on which the Department of Health Services expressed serious concern. (Pgs. 13—17). To date, no report has been released to the public regarding corrective action for clean up of these radioactive sites!

In addition, on the main UC Berkeley campus LBNL occupies over 100,000 sq. feet of laboratory space, including entire buildings such as the Donner Laboratory and Melvin Calvin Laboratory, with off-campus Buildings 934 and 903 in South West Berkeley and space at the Richmond Field Station. Although LBNL's Hazardous Waste Facility Permit of 1993 requires LBNL to investigate and address all historic releases of hazardous waste and chemicals, it appears that no investigations have been done to scrutinize these sites for LBNL's historical contamination.

Since November 1991, the State of California Department of Toxic Substances Control and LBNL have identified one hundred and seventy four (174) "units" of contamination in the Strawberry Creek Watershed. Eight (8) of these 174 units were identified as radioactive. Based upon these findings, DTSC concluded that corrective action was necessary to characterize the contamination at the site.

By May of 2003,only twenty nine (29) soil units, and thirteen (13) ground water units were further evaluated in LBNL's Human Health Risk Assessment (HHRA). DTSC also requested LBNL to prepare an Ecological Health Risk Assessment.

Earthquake Disaster: Potential Hazard Landslide Zones

On February 14, 2003 the California State Department of Conservation Geological Survey released the Final Seismic Hazard Maps that illustrate the seismic hazard zones of the University of California lands, of Berkeley and Oakland (including LBNL), that encompass areas prone to soil liquefaction (failure of water saturated soil) and earthquake induced landslides. (Attachment 1).

Areas of contamination cannot be considered contained in earthquake potential hazard landslide zones that appear on the Seismic Hazard Maps. Landslides break roads, buildings and even borders of contaminant plumes, cause underground soil erosion, subsidence, lateral spreading and collapse. Disturbed land allows contaminants to migrate in the soil and groundwater, storm drains and creeks into residential communities and putting at risk human and ecological health. It appears that the RCRA reports do not address such a disaster potential predicted in the event of strong earthquake on the Hayward Fault within the next 30 years by the USGS.

Historical Landslide Activity In Berkeley

Landslides in Berkeley, particularly the Berkeley Hills, are well known to residents of the area. The landslides occur for four main reasons: soils, steep slopes, rainfall and sub-surface erosion. The soils in the Berkeley Hills are high in clay content. Clay affects the soil in that it has great water-holding ability and can increase the volume of the soil by 20 percent. The drainage rate in this kind of soil is very slow. These features cause a loss of shear strength and promote great slope instability. Slope is the most important site characteristic associated with the occurrence of soil slips, which are landslides involving only the material above the unweathered bedrock surface. Soils that are typically shallow and rocky are extremely prone to slippage. Slopes which have high water content, or slopes which have been cut into for roadways or building foundations influence landslide occurrences.

Most landslides occur during or immediately after storm periods in which more than seven inches of rain fell. The North Berkeley Hills are high in clay content and have steep slopes. Intense storms in February 1940, October 1962, and January 1982 had record-breaking precipitation of up to 6.97 inches in one day. Much damage was caused to the University and to residential areas as a result of the sliding from these storms. In the storm of February 1940 more than 35 slides occurred, many of them seriously threatening homes. Houses were evacuated in many areas of North 'Berkeley. The storm which came in October 1962 caused much damage in the hill area and necessitated the closure of North Canyon Road from the Memorial Stadium to the Radiation Laboratory because of 600 foot long mud slides close to the gates of the Lab. This slide washed onto Gayley Road covering it with up to a foot of silt. Mud and water flowed into Cowell Hospital, International House, and the Poultry Husbandry Laboratory. Strawberry Center recreationalarea was surrounded by three feet of mud.

In January 1982 another intense storm caused enormous damage. Grizzly Peak Boulevard was partly blocked by landslides and Centennial Drive was closed from Strawberry Canyon pool to the Lawrence Hall of Science. The shoulder level of Centennial Drive dropped several feet making it necessary to reconstruct and reposition the road. Centennial Drive was closed for eight months.

Landslides in the Dry Season and The Lennert Aquifer

In 1974 two landslides on University property were lubricated by the groundwater of the Lennert Aquifer during the dry season. A large slide occurred inside the Lawrence Berkeley Lab breaking a building (46) in two, took out a road and underground utilities, and threatened to undermine the Lawrence Hall of Science. The other slide threatened the steep part of Centennial Drive just below LHS. B.J. Lennert installed the Shively Well No. 1 just west of the University's Space Science Laboratory. The well was eminently successful; both slides stopped. Since then that groundwater produced by the 350 foot well has been dumped into Strawberry Creek at the Botanical Garden, which is why the creek has never dried up during droughts. This little-known aquifer can serves as a "water bank" source for Berkeley residents as reserve drinking water. It does not appear in any of the LBNL documents nor is its threat for future landslides been evaluated in the RCRA documents.

Strawberry Creek and its Tributaries

The text of the Human Health Risk Assessment (May 2003) denies the historical creek restoration work and laboratory studies that have been carried out on the Upper Canyon reaches of Strawberry Creek, the Campus Strawberry Creek Watershed Management Plan and the entire daylighted portions of Strawberry Creek Watershed in the cities of Oakland and Berkeley to the outflow of the creek waters into the SF Estuary. The Urban Creeks Council, Friends of Strawberry Creek, and countless students work in the waters and along the banks to clean-up trash and debris, weed infestations of non-native plants, restore banks with native plants, test and GIS the streams on a year round basis.

The Incremental Lifetime Cancer Risk (ILCR) theoretical modelling only calculates surface water exposure to a "recreationist receptor" of the "residential scenario'.

Furthermore the RCRA reports deny the historical document of the Map of Strawberry Valley and Vicinity Showing the Natural Sources of the Water Supply of the University of California by Frank Soulé, Jr., Professor of Engineering, 1875. (Attachment 2). Today, 128 years later, several dozen creeks and their tributaries on the Soulé Map are well known Mediterranean streams and appear on LBNL's Annual Site Environmental Reports for the public. These include Berkeley Creek; Blackberry Creek AKA North Fork of Strawberry Creek; Cafeteria Creek; Ravine Creek; Ten-Inch Creek; Chicken Creek; No-Name Creek; South Fork Strawberry Creek; Botanical Garden Creek; Banana Creek; and Pineapple Creek, and close to 30 springs.

The significance of the creeks as conduits for migrating contaminants from soil runoff, seepage from underground plumes etc (as is the case with Chicken Creek and the underground tritium plume), has not been addressed, (Attachment 3). There is no evaluation of the potential health hazards following a seismic event nor is the soil liquefaction potential/soil failure within the creek water basins that lace the Strawberry Creek Watershed considered.

Groundwater Contamination Mixed Waste Plumes

In March 2003, LBNL published a figure showing the extent of volatile organic compounds (VOCs) in ground water. These plumes are associated with the large Tritium groundwater plume in the Chicken Creek watercourse. DTSC has jurisdiction over mixed waste. We are asking that the clean up of the Tritium Plume mixed with solvents/VOCs be managed under the RCRA Corrective Action Plan. (Attachment 4 a and b).

Full Environmental Restoration

The City Council of Berkeley passed an action on March 11, 2003 directing the City Manager to object to the IMPOSITION of risk-based clean-up standards and calls for the Full Environmental Restoration at Lawrence Berkeley National Laboratory. (Attachment 5).

The City of Berkeley Environmental Commission and the Council support full environmental restoration so as to preserve the Berkeley and Oakland hills groundwater for future generations. If water becomes a scarce resource in the future, Berkeley groundwater may be considered for domestic, municipal, irrigation and industrial purposes. The presence of large quantities of concentrations of Radionuclides, and 162 contaminants including Volatile Organic Compounds, (VOCs), Polychlorinated Biphenyls (PCBs), Pesticides, Fuels and Metals.(RCRA Corrective Measures Study Plan May 2002: Table 1.1) This lowering of standards contradicts City of Berkeley land and water protection ordinances.

Future Community Input

We request the proposed community workshop not take place before Labor Day, instead after the close of summer vacations. We suggest September 18, 2003.

We would like to be invited to address the full group of regulators attending the July 2003 LBNL/RCRA Quarterly Meeting on these concerns.

To Conclude

We ask you that you deny LBNL's request for No Further "risk-based" Remedial Action for any of the units covered in the Health Risk Assessment (29 soil and 13 groundwater) and that all these units be retained in the Corrective Measures Study (CMS), as well as all creeks, all springs, and hydraugers.

We ask for your comments and assistance on the following:

For the intent of the Resource Conservation and Recovery Act, we call for a Source Water Protection Plan to conserve and recover the Upper Strawberry Creek Watershed that is still impacted by spreading toxic plumes. In this regard, we request a comprehensive watershed analysis be conducted of the drinking "water bank" (Lennert Aquifer) and its groundwater movements feeding Strawberry Creek tributaries.

We call for an Ecological Protection Zone in the Strawberry Creek Canyon and the Berkeley-Oakland Hills to conserve and protect human and ecological life from further harm in the 21st Century.

For the Corrective Action Process of the RCRA we call for a state-of-the-art assessment of the LBNL waste using GIS mapping data of the water sources, the 4 earthquake faults and the ground water plumes layered on the California Geological Survey Seismic Hazard Maps that indicates the LBNL site at very high risk of earthquake induced landslides. For the safety of LBNL workers, campus employees as well as neighbors, it would be prudent to take great care in studying the potential impacts from seismic movement breaking out the borders of the toxic groundwater plumes and pits.

We ask for a GIS layer of all of the creeks, springs, hydraugers, storm drains and sanitary sewer lines.

Therefore we ask your department to create GIS layers of these data sets that can be overlaid onto a GIS layer of the known ground water plumes in relation to the 4 faults and the seismic hazard landslide Geological Survey Maps.

We request that a comprehensive watershed analysis to study the "water bank" of the Lennert Aquifer and its groundwater movements be conducted. We request an assessment, and modeling of the 4 known earthquake faults, i.e., the Hayward Fault, the Wildcat Fault, the Strawberry Fault, and the Hamilton Gulch Fault as well as the multiple cross-faults throughout the Strawberry Canyon in relation to the aquifer.

We request the key elements of the Precautionary Principle be included into DTSC's decision making process.

We further request that the cumulative environmental impacts of the 174 radioactive and hazardous units be considered as well as the synergistic effects of radionuclides, chemicals and bio-agents (combined) on human and ecological receptors.

Sincerely yours,

Committee to Minimize Toxic Waste

//signed by//

Jim Cunningham
1007 Miller Ave
Berkeley, CA 94708

//signed by//
Mark McDonald

//signed by//
Pamela Sihvola
P.O. Box 9646
BERKELEY, CA 94709

Community Environmental Advisory Commissioners*

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Neighbors of the Schoolhouse Lincoln Creek Watershed

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*For identification purposes only

Cc: Congresswoman Barbara Lee
Senator Barbara Boxer
Senator Diane Feinstein
Secretary of Energy Spencer Abraham
Members of the Berkeley City Council
Michael Rochette, SWRQCB
Secretary Winston H. Hickox, Cal EPA
Ed Lowry, Director/DTSC

Attachment 2 – Petition – Friends of Strawberry Creek Watershed 6-07-05

Dr. Waqar Ahmad, Facility Permitting Branch
Cal-EPA-Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA, 94710-2737

Senator Barbara Boxer
United States Senate
112 Hart Senate Office Building
Washington, D.C. 20510

Regarding the Draft RCRA Corrective Measures Study on the Proposed Soil and Groundwater Clean-up Remedies for Lawrence Berkeley National Laboratory (published July 2004). Written comments requested by the California Department of Toxic Substances Control.
For Public Hearing on the Lab Cleanup May 26, 2005 — through June 8, 2005.

Dear Dr. Waqar Ahmad,
Dear Senator Barbara Boxer

In what follows are written comments from several members of the community group, FRIENDS OF STRAWBERRY CREEK WATERSHED. We support the City of Berkeley's policy of full environmental restoration for the Lawrence Berkeley Lab clean up of toxic soils and groundwater to the highest standards. We are further concerned for the long-term management of contaminated groundwaters that could migrate downhill into Strawberry Creek and move offsite towards residential areas. We suggest forming a Citizens Watershed Advisory Group to assist in regulation.

INTRODUCTION: Simply stated, the focus of Friends of Strawberry Creek Watershed is on the protection of the Strawberry Creek Watershed waters and the betterment of Strawberry Creek, the signature creek flowing through the University of California and the City of Berkeley into the San Francisco Bay. The Lawrence Berkeley National Laboratory is an industrial park employing over 3000 workers and is located on the University of California lands, uphill and east of the Main UC Campus. The natural drainage from the Lab flows downhill and downstream in many little streams that reach perennial Strawberry Creek.

Our MISSION is to restore, protect, and improve Strawberry Creek from the Berkeley hills to the San Francisco Bay, bringing Berkeley the pleasures of a healthy aquatic and riparian ecology benefiting both people and the natural environment. Our goals include restoring creek banks and accessibility, improving water quality, encouraging native vegetation and removing invasive non-natives, enhancing wildlife habitat and populations, daylighting the creek whenever possible, and educating and involving the public in the betterment of Strawberry Creek.

PURPOSE: This communication is to inform the reader on some of the human and environmental health concerns voiced by the many citizen volunteers who work with us in cleaning up stretches of the Strawberry Creek watercourse, restoring creek banks by removing invasive plants and replanting native plants, studying and testing the water quality for toxic pollutants that can harm human and wildlife health.

1) Many of are committed to practicing SUSTAINABLE DEVELOPMENT and deeply feel we must "GREEN" our environment on the local level. Beautiful creeks, wild land and wildlife are within the LBNL site-unfortunately they are still off limits to the community. Sadly, we hear many unanswered questions about the contaminated groundwater that has been spottily identified by the 15 years of Department of Defense funded studies. We know groundwater migrates downhill, downstream moving westward underneath the Campus, streets, businesses and our homes and gardens. We know some groundwater reaches the Strawberry Creek and Lincoln-Schoolhouse Creek watercourse basins and it is likely most comes downhill from the LBNL. There is much we don't know. Still, our concerns for a healthy sustainable environment require pure clean groundwater and clean creek water--watershed-wide far beyond the lands of the University all the way into the San Francisco Bay.

2) We are advocating for forming a Citizens Watershed Advisory Group to participate in a process that reframes a long term Comprehensive Groundwater/Surface Water Study, Monitoring and

Clean-up Management Plan for REMOVING the dirty groundwater islands that are well known to be in the lands of the LBNL uphill and east of our homes in the Berkeley Oakland Hills.

3) A commonsense mandate for the Watershed Advisory Group is to establish a goal of PROTECTING GROUNDWATER AS A DRINKING WATER SUPPLY, a long-term beneficial use of groundwater for our benefit that will also benefit Strawberry Creek and its tributaries.

4) WELLS More and more people are discovering old wells in their backyards. Many people are now restoring wells in their gardens and expect to provide water to sustain their neighborhood in the event of breaks in the municipal potable water service. This is not very expensive as the water table is quite high throughout Berkeley and particularly accessible in the creek basin soils that are in the old historic watercourses –some of which have surface creeks, culverted underground creeks and others have filled creeks which we know are still alive as those low spots are wet throughout the dry seasons.

5) Those of us with edible vegetable and fruit gardens irrigated by well water worry that the dirty groundwater from uphill will reach our wells. We worry that if we test and then purify our well water in order to drink it (with the tablets we use on backpacking trips),that it may still contain toxic chemicals and even radionucleuides that could harm us and our pets.. We just don't know enough yet.

6) WELL WATER FOR DISASTER READYNESS In order to be prepared for a natural or manmade disaster, the site WWW.READY.GOV OF HOMELAND SECURITY informs that we must think in a commonsense framework; we must have the tools and plans in place to make it on our own without help from local government. Well water may be used to quell fires should a quake cause fires or should another firestorm send firebrand sparks from eucalyptus trees in the Berkeley Oakland hills to ignite our old dry wooden homes.

7) Recent literature on the 1906 Quake and Firestorms in San Francisco and Santa Rosa indicate that when the water mains broke throughout the cities, the neighbors who had wells and cisterns were able to set up bucket brigades and save homes and businesses. Increasingly, as we embrace the values of sustainable green living, we must be able to count on clean groundwater from our wells for drinking and bathing during an emergency and the growing practice of irrigating edible plants with well water in normal times. Staff at the State Water Resources Control Board whose task is to protect clean water recommended the concept for this Advisory Group.

8) This writing is also to provide a list of written comments and concerns for the California State Department of Toxic Substances to respond to before the closure of THE LAWRENCE BERKELEY NATIONAL LABORATORY'S DRAFT CORRECTIVE MEASURES STUDY (CMS), CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) INITIAL STUDY, NEGATIVE DECLARATION that may remediate the collocated VOC toxins and radionuclides in groundwater and soils.

9) Simply stated, the experimental clean up of the dirty patches identified to date by the Lab's own personnel listed in the Corrective Measures Study scheduled to finish in 2006 raises many more question that than answers provided to date. Therefore a Citizens Advisory Group could continue to request answers, thus serving as a model in contributing to the field of lab clean-up community relations for the rest of the nation.

10) WIDESPREAD CONCERNS IN THE COMMUNITY-- We have not heard that anyone disagrees with the common sense goals of clean air, clean creek, ground and Bay water, clean vegetation and clean soils for humans, plants, wildlife and other organisms in the food chain.

11) Most of the workers at the Lab with whom we have spoken agree with the above. However, the question still arises time and again in the community: Is there a management climate of permissiveness at LBNL—a practice that lack discipline in the control of toxic waste disposal and

waste sites? Stories abound of past years of dumping of radioactive and toxic chemicals into arroyos and ditches (creek courses) or simply down the drain into the notoriously cracked sanitary sewer system that flows and leaks into the ground under the University lands and the City, out of sight and out of mind. In the late 1980's work began to improve the sewers and is not yet completed. The Regulatory history of LBNL also begins in the late 1980's.

12) HIGHLIGHTS OF THE REGULATORY HISTORY: ON TOXIC WASTE AT LBNL

> 1988 DOE publishes the first Environmental Health and Safety related assessment of LBNL.
>
> 1991 DOE funded the Tiger Team Report which found 678 violations of DOE regulations concerning management practices at LBNL.
>
> 1990 to 1995 the California Agreement in Principle was funded by DOE for the six U.S. Department of Energy facilities within the State as a measure to assist in assuring the public that DOE is acting in a responsible manner with respect to human health, human safety, and the health of the environment. It was conducted by the State Department of Health Services with the State Water Resources Control Board for State experts to review that various environmental monitoring programs at each facility to determine if they were adequate to monitor the effects of contamination of the radioactive and chemical waste handling sites in testing surface and groundwaters.
>
> The concluding Report released by the State Department of Health in 1995 summarizes the RESISTANCES of DOE to the oversight activities of the State of California relative to the AIP recommendations—particularly the efforts of AIP to assist in further communications between DOE and the public for non-site specific DOE operations. The report characterizes:
>
> "DOE has the reputation of being closed to communication and unreachable, DHS through AIP has noted that DOE could begin to overcome this reputation if efforts were made to gather public input early in the process". (Pg. 2)
>
> The AIP Report goes on to indicate that for the final months the scope of inquiry was reduced to a revised list (without informing the DHS) and shutting AIP out of the process. The response to each listed area: repeats: "the AIP Program has not had an opportunity to review or comment on any report, study of this area." Why was this so?
>
> 2001 LBNL was designated as a "California Hot Spot" in the list of Cold War Nuclear sites by the State.

13) GAO REPORT 2004 Senators Barbara Boxer and Jim Jeffords requested the Government Accounting Office to update the Congress on how effective clean-ups of contaminated sites under institutional controls are in protecting the public from exposure to future exposure of hazardous waste.

14) 2005 The GAO Report titled HAZARDOUS WASTE: IMPROVED EFFECTIVENESS OF CONTROLS AT SITES COULD BETTER PROTECT THE PUBLIC, can be found at http://www.gao.gov/cgi-bin/getrpt/GAO-05-163. The results of the investigation found that the Environmental Protection Agency (EPA) remedy decision documents failed to identify how the institutional controls would be implemented, monitored or enforced. Commenting on the GAO document, press reports say the present regulatory 'climate' permits polluters of hazardous waste to shirk their responsibility.

15) Secondly, the EPA failed to adequately implement, monitor or enforce remedies necessary to minimize exposure to contaminants left on-site AFTER the clean up was completed.

16) The GAO recommended that the Environmental Protection Agency cleanup, "clarify its institutional controls guidance." By limiting to institutional controls solely on institutional lands, managed by the polluter, the present plan and practices fail to ensure public access to adequate data, sampling and information for independent environmental review and fail to reassure taxpayers that their taxes are being used for the betterment of human and environmental health

17) The formation of a Citizens Watershed Advisory Group could provide balance and follow these recommendations for the long-term relations between the LBNL management and the neighboring communities on what must be done for the long-term clean-up and monitoring of hazardous waste—even waste spots that have yet to be identified. An ongoing Community Advisory Group would not permit this site to be deleted from history without adequate clean up.

18) Fifteen years of hazardous waste issues, studies and practices at LBNL have passed. Ironically, LBNL is still heavily guarded and requires elaborate security check for admittance. This is not reasonable given that the research is no longer classified. Such high security does little. to reassure the public that the management at LBNL is responsible.

19) The DTSC and DOE documents on corrective action on proposed soil and groundwater clean-up remedies are still presented as experimental. The planning is flawed because there is no long-term requirement for the concerns of the public with respect to on-site and now, important off site contamination studies that were recommended by Lab scientists but not followed up. Still, LBNL has a number of scientists who love creeks. They are committed to a clean and green environment and could be engaged to design sound studies and sound science clean up and aftercare.

20) It is would be prudent to move forward to target LBNL for a model Watershed Advisory Group process of knowledgeable citizens, scientists and regulators in order to come up with the best possible clean up of damaged water and vegetation because we are facing the ominous threat of a massive earthquake on the Hayward Fault system predicted by the USGS scientists within the next 25 years.

21) No one knows what shape those earth-shaking moments will take. No scientist knows which land will slide (it has before) and whether the hypothesized borders of the contaminated islands (plumes) at LBNL will be breached releasing dirty waters which will wend their way into the Strawberry Creek watercourses. We must be vigilant and together we can reasonably do the best possible study, planning, clean-up, and long term monitoring to protect our beloved creek, our groundwater, our health and the health of the environment.

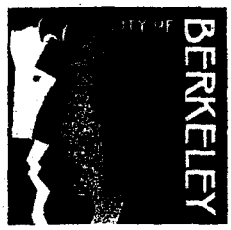
Sincerely yours,

Jennifer Mary Pearson, co-facilitator for Friends of Strawberry Creek Watershed

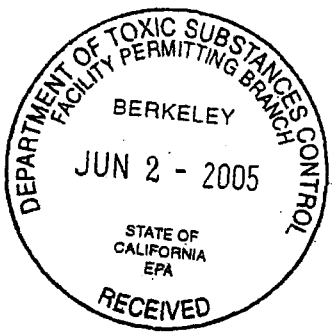
Carole Schemmerling, co-facilitator for Friends of Strawberry Creek Watershed.

cc, The Regents of the University of California
City of Berkeley
State Water Resources Control Board

Attachment 3 – Letter from Phil Kamlarz – City of Berkeley May 26, 2005



Office of the City Manager



May 26, 2005

Mohinder Sandhu, Branch Chief - Permitting
Department of Toxic Substances Control
700 Heinz Street
Berkeley, CA 94710-2721

Subject: CMS Study Negative Declaration and Statement of Basis

Dear Mr. Sandhu:

The Berkeley City Council recently took a position on the process of cleaning up legacy pollution at the Lawrence Berkeley National Laboratory. Please accept these comments in addition to comments made by the City's Toxics Management Division.

The City encourages the Department of Toxic Substances Control (DTSC) to clean up the site to the most restrictive clean up standards feasible. To this end, the City seeks additional funds from the Department of Energy to fulfill this goal.

The City also encourages the DTSC to use the Community Environmental Advisory Commission meetings as a venue to disseminate information, receive public input and respond to public concerns for the long term monitoring of any pollutants left in place.

In addition, the City requests that DTSC and the Water Board review the geological structure of the campus in more detail to determine if pollution plumes are fully delineated and stable or whether the complex geology will permit migration downhill or into surface or near surface waters.

Sincerely,

//signed by//

Phil Kamlarz
City Manager

cc: Honorable Mayor, and Members of the City Council
Steven Chu, Laboratory Director, Lawrence Berkeley National Laboratory
Community Environmental Advisory Commission, City of Berkeley
Richard Dailey, Federal Project Director, Department of Energy, Oakland
Dan Marks, Director of Planning & Development
Bruce Wolf, Chief Executive, Water Board, Oakland

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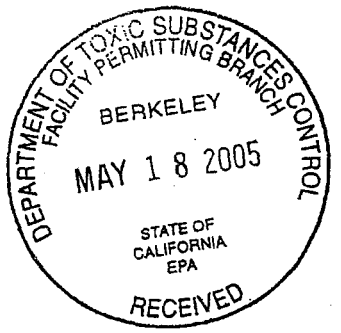
Attachment 4 – Letter from EBMUD – William Kirkpatrick May 16, 2005

EAST BAY
MUNICIPAL UTILITY DISTRICT



May 16, 2005

Waqar Ahmad, Project Manager
California Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710

Re: Negative Declaration – Department of Toxic Substances Control - Proposed Soil and Groundwater Cleanup at Lawrence Berkeley National Laboratory, Berkeley

Dear Mr. Ahmad:

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the Negative Declaration for the Department of Toxic Substances Control Proposed Soil and Groundwater Cleanup at Lawrence Berkeley National Laboratory located in the City of Berkeley. EBMUD has no comments regarding environmental issues for this project.

If you have any questions concerning this response, please contact David J. Rehnstrom, Senior Civil Engineer, Water Service Planning at (510) 287-1365.

Sincerely,

//signed by//

William R. Kirkpatrick
Manager of Water Distribution Planning

WRK:JLM:sb
sb05_141.doc

cc: Hemant Patel, Project Manager
U.S. Department of Energy
PO Box 54
Oakland, CA 94612

Attachment 5 – Letter from Andrea Pflaumer June 7, 2005

From: <Agpflaumer@aol.com>
To: <wahmad@dtsc.ca.gov>
Date: 6/7/2005 12:54:26 PM
Subject: Groundwater cleanup at LBNL

FILE COPY

To Whom it May Concern,

As a resident in the Northeast Berkeley Hills I am deeply concerned about the groundwater clean-up (and the eventual site clean-up) at the Lab. I want to strongly encourage you to develop a citizen review/action panel similar to the one that was formed after DTSC took over the Campus Bay project from Richmond.

Sincerely,

Andrea Pflaumer

Attachment 6 – Letter from Department of Transportation – Sable June 7, 2005

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
111 GRAND AVENUE
P. O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-5505
FAX (510) 286-5513
TTY (800) 735-2929

FILE COPY

Flex your power!
Be energy efficient!

June 7, 2005

ALA013083
SCH#2005042160

Mr. Waqar Ahmad
Department of Toxic Substances Control
One Cyclotron Road
Berkeley, CA 94720

Dear Mr. Ahmad:

CORRECTIVE MEASURE STUDY – NEGATIVE DECLARATION

Thank you for including the California Department of Transportation (Department) in the environmental review process for the Corrective Measure Study project. The comment presented below is based on the Negative Declaration (ND), and applies only if the project involves work in the State Right of Way (ROW). As lead agency, the Department of Toxic Substances Control is responsible for all project mitigation, including any needed improvements to state highways. Please notify the applicant that the Department will not issue an encroachment permit, discussed below, until our concerns are adequately addressed. Further comments will be provided during the encroachment permit process; see below for more information regarding encroachment permits.

Encroachment Permit
Work that encroaches onto the State ROW requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating State ROW must be submitted to the address below. Traffic-related mitigation measures should be incorporated into the construction plans during the encroachment permit process. See the website link below for more information.
http://www.dot.ca.gov/hq/traffops/developserv/permits/

Sean Nozzari, District Office Chief
Office of Permits
California DOT, District 4
P.O. Box 23660
Oakland, CA 94623-0660

Please feel free to call or email Patricia Maurice of my staff at (510) 622-1644 or patricia_maurice@dot.ca.gov with any questions regarding this letter.

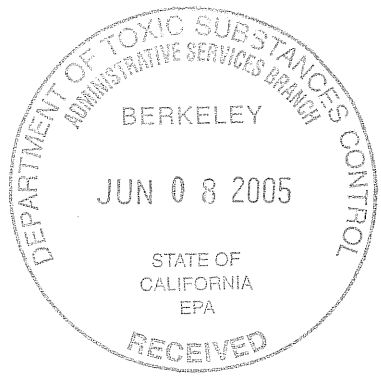
Sincerely,

TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Ms. Terry Roberts, State Clearinghouse

Attachment 7 – Letter from D Thompson and KJ Sharp June 8, 2005

D Thompson / J Sharp - 2663 Le Conte Avenue Berkeley CA 94709 - 510/644-9344



8 June 2005

Dr Waqar Ahmad, Project Manager
Department of Toxic Substances Control
700 Heinz Avenue Suite 200
Berkeley CA 94710

Re: Comments on LBNL Draft Corrective Measures Study

Dear Dr Ahmad:

Since 1988, we have been two of the Lawrence Berkeley National Laboratory's nearest downstream neighbors. A daylighted portion of Strawberry Creek's North Fork flows across the street in front of our home.

Hence, we are eager to hear of any progress being made to clean up soil and groundwater contamination stemming from Lab operations over the past 65 years.

On the technical side, neither of us feel qualified to judge whether the recommendations set forth in the DTSC's Draft Corrective Measures Study are adequate to remediate this legacy contamination to the highest standards feasible in the most cost-effective and timely manner.

However, from the standpoint of *public involvement,* we think that the cleanup effort—if handled correctly—represents a great opportunity for your agency (and LBNL) to build visibility and some much-needed good will among the Lab's residential neighbors.

For this reason we strongly suggest that the DTSC do everything within its power to encourage that a **Citizen Watershed Advisory Group (CWAG)** be established to track implementation of whatever corrective action measures are adopted.

We are aware that the Berkeley City Council recently frowned upon this idea when proposed by Berkeley's Community Environmental Advisory Commission. Likewise, we know that LBNL typically prefers to limit citizen participation in oversight activities to the bare minimum required under the law.

Yet it is our understanding that a CWAG will be associated with DTSC's new cleanup effort near UC's Richmond Field Station. If appropriate for Richmond, why shouldn't a CWAG also be part of the DTSC's cleanup strategy for LBNL?

Our feeling is that to be real, "public involvement" should be more than a DTSC fact-sheet title, an annual public hearing, or a headline in one of the Lab's many PR publications.

Sincerely,

Daniella Thompson

James M Sharp

Attachment 8 – Letter from Bill Walzer May 28, 2005

William Walzer

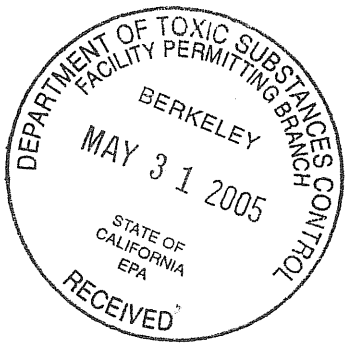
5/28/5

Mr. Waqar Ahmad,
Project Manager, DTSC,
700 Heinz Avenue, Suite 200,
Berkeley, CA 94710

I own a house on Allston Way that has Strawberry Creek running through the backyard. It is lovely but would be so much richer if more fish could survive in it. Please do everything you can to clean up the contamination up at the Lab.

Bill

Bill Walzer
2907 Lorina Street
Berkeley, CA 94705



2907 Lorina Street, Berkeley, California 94705
510-845-6985

walzer @ usa.net
fax 510-644-9964 pager: 510-290-8398